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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/423,415	11/05/1999	SEISUKE MORIOKA	27877.00066	6706

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EXAMINER

BLACKMAN, ANTHONY J

ART UNIT PAPER NUMBER

2672

DATE MAILED: 03/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/423,415

Applicant(s)

MORIAKA

Examiner

Anthony Blackman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 5, 1999
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-26 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-13, 16-22, and 24-26 is/are rejected.
- 7) ☒ Claim(s) 14, 15, and 23 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Nov 5, 1999 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) AND ; 20) ☐ Other:

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DETAILED ACTION

1. Each page of the drawings, declaration, claims, specification and abstract have a horizontal line from the top of each page to the bottom of each page. Applicant is required to correct said horizontal lines on said sections before this case is issued for allowance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 10-13, 16-18, 20-22, 24, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by TROELLER et al, US Patent No. 5,768,445.

4. Consider claims 10 and 21. TROELLER et al disclose a processor including a data decompression circuit (figure 1, element 112, figure 2, column 3, lines 5-14, 16-26, 41-65), a first storage device having texture data and electronically coupled to said processor (figure 1, elements 102 and 112, and figure 2, element 112; and a texture buffer having decompressed texture data and electronically coupled to said processor (figure 1, elements 102 and 112, and figure 2, element 112).

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5. Consider claim 11. TROELLER et al meets limitations for claim 10, including the further comprising of a frame buffer, wherein said processor stores image data in said frame buffer (figure 2).

6. Consider claim 12. TROELLER et al meets limitations for claim 10, wherein said processor reads decompressed texture data contained in said texture buffer and performs image processing of said decompressed texture data for conversion to image data ((figure 1, elements 102 and 112, and figure 2, element 112).

7. Consider claim 13. TROELLER et al meets limitations for claim 10, wherein said processor reads compressed texture data from said first storage device, said data decompression circuit decompresses said read compressed texture data, and said processor stores said decompressed texture data, and said processor stores said decompressed texture data in said texture buffer ((figure 1, elements 102 and 112, and figure 2, element 112).

8. Consider claim 16. TROELLER et al meets limitations for claim 13, wherein said processor includes a FIFO storage device which temporarily stores said read compressed texture data (figure 3, column 8, line 21 to column 9, line 6).

9. Consider claim 17. TROELLER et al meets limitations for claim 16, wherein said data decompression circuit receives said read compressed texture data from said FIFO storage device (figure 3, column 8, line 21 to column 9, line 6).

10. Consider claim 18. TROELLER et al meets limitations for claim 13, wherein said processor includes a palette transformation circuit, said palette transformation circuit performing

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palette transformation of said decompressed texture data (column 5, line 62 to column 6, line 30, column 10, lines 52-57).

11. Consider claim 20. TROELLER et al meets limitations for claim 10, wherein said texture data in said first storage device is compressed (figure 2).

12. Consider claim 22. TROELLER et al meets limitations for claims 21, further comprising the step of converting said decompressed texture data to image data, and storing said image data in a frame buffer (figures 1-2).

13. Consider claim 24. TROELLER et al meets limitations for claims 21, further comprising the step of performing palette conversion of said decompressed texture data prior to said step of storing said texture data (column 5, line 62 to column 6, line 30, column 10, lines 52-57).

14. Consider claim 26. TROELLER et al meets limitations for claims 21, wherein said step of storing said decompressed texture data includes the step of updating said decompressed texture data in said texture buffer with new decompressed texture data (figures 1-2).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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16. Claims 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over TROELLER et al, US Patent No. 5,768,445 in view of SCHILLING et al, US Patent No. 6,236,405.

17. Consider claim 19. TROELLER et al meet limitations for the apparatus of claim 13, however does not expressly state the following specific limitation for claim 19; wherein said processor includes a mip map generation circuit, and mip map generation circuit generating a mip map of said decompressed texture data (column 1, lines 29-62, column 17, line 45). It would have been obvious to one at the time of the invention to utilize the mip mapping texturing teachings of SCHILLING et al with the compression and decompression texturing means of TROELLER et al because SCHILLING et al discloses "A footprint assembly system mapping textures onto surfaces by approximating the projection of a pixel onto a texture by a number of square mipmapped texels, in addition to a second texture mapping unit which also performs environment mapping, reflectance mapping and detail maps (abstract, lines 14-19). Modifying TROELLER et al with SCHILLING et al increases user operability include environment and video mapping, [i]n addition to achieving higher texturing speed at lower system costs..." (column 2, lines 39-46)

18. Consider claim 25. TROELLER et al meets limitations for claims 21, however does not expressly state the following specific limitation for claim 25 further comprising the step of generating a mip map of said decompressed texture data prior to said step of storing said decompressed texture data (column 1, lines 29-62, column 17, line 45).

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Allowable Subject Matter

19. Claims 14-15, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims because none of the prior art teach or suggest the following distinctions; wherein transmission of texture data between said texture buffer and said processor is faster than transmission of texture data between said storage device and said processor; nor wherein said first bus carries texture data between said texture buffer and said processor faster than said second bus carries texture data from said storage device and said processor; nor further comprising the step of providing a processor, and transferring data between said texture buffer and said processor faster than transferring data between said storage device and said processor.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Blackman whose telephone number is (703) 305-0833. The examiner can normally be reached on Monday through Thursday from 8 a.m. to 4 p.m. EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi, can be reached on (703) 305-4713.

Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

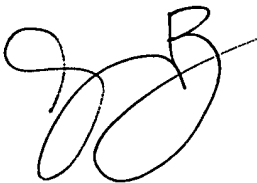
(703) 872-9314, (for formal communications intended for entry) Or:

(703) 746-5731 (for informal or draft communications sent directly to examiner's PC, please label "PROPOSED" or "DRAFT",)

Hand-delivered responses should be brought to Crystal Park 11, 2121 Crystal Drive, Arlington. VA.,

Sixth Floor (Receptionist).


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



Anthony J. Blackman

Patent Examiner

3/4/2002



JEFFERY BRIET
PRIMARY EXAMINER